

The following papers were read:—

1. On the Larger Mammals of Tunisia.
By SIR HARRY JOHNSTON, K.C.B., F.Z.S.

[Received May 3, 1898.]

Eighteen years ago I spent eight months in Northern Tunisia and lived for some weeks with a French military expedition on the western borderland of that country. A good deal of sport was indulged in by the French and Tunisian officers, and as the result of one day's shooting I was able to picture in a group a Lioness, a Leopard, a Barbary Stag, a number of Wild Boars, a Hyæna, and some Mountain Gazelles. Such a bag would be almost impossible now. Three Lions were killed near our camp in six weeks at the period I refer to (1880). Now the Lion is practically extinct in Tunisia. If any specimens still linger they would be found in the thickly-forested mountains round Ain Draham, in the extreme north-west of the Regency. The Leopard is still found in the wilder parts of Northern and Western Tunisia. The Striped Hyæna is sparsely distributed all over the Regency and right down into the Sahara, though of course it is never found now near any of the big towns. Yet I can remember a Hyæna being killed in the suburbs of Tunis in 1880. The Jackal is, however, abundantly met with: I have seen wild ones running across my garden at Marsa, twelve miles from Tunis. Genets and Ichneumons are met with, and the Arabs constantly speak of a Wild Cat which from their accounts would seem to be *Felis maniculata*.

The Cheetah and the Caracal are occasionally met with in the extreme south of Tunisia, to the south of the salt lakes of the Jerid. I have seen skins of these animals in the possession of Arabs. The Pardine Lynx is found in the wooded mountains. The Barbary Ape is nowhere reported to exist in Tunisia. Arabs—usually Moroccans—often appear in the towns of the Regency with tame Baboons. These they are said to bring from the countries south of Morocco. Three of these animals which I have examined seemed to me to be the Arabian Baboon (*Cynocephalus hamadryas*), hitherto known to us as coming from Nubia, Somaliland, and Arabia—the Baboon of ancient Egyptian art. One of these animals (a female) I purchased from its Moroccan owner, and she is still alive and in my possession. Her former owner stated that she was brought from Sūs, a Sahara country to the south of Morocco. Mr. Sclater, who has seen her, states that she is undoubtedly of the Arabian species. This, however, is a digression from the subject of my present paper, though I think the matter of sufficient interest to be mentioned.

The little Fennec Fox is common in Southern Tunisia; and a Fox scarcely distinguishable from the English form is found in the wooded country.

In the district of Mateur in Northern Tunis there is a rather remarkable herd of Buffaloes—about fifty in number. They are said to be descended from a few domestic Buffaloes of the Indian species presented forty years ago or more by a King of Naples to the Bey of Tunis. They were placed on a property of the Bey's where there is a large swampy lake, in the middle of which rises a mountainous island. Here they have resumed the feral state, and, judging from several heads I have seen, are developing much longer horns than those of the domestic Buffalo of Italy. These creatures are now strictly preserved by the Bey, and it is useless to ask for permission to shoot them, as it is always withheld.

The Bubaline Antelope (*Bubalis bosclaphus*) formerly found in Tunisia is now quite extinct there, I hear, though it is still found in Southern Algeria and in the Tripolitaine. It must have extended its range once into Central or even Northern Tunisia, judging by the frequency of its appearance in Roman frescoes and mosaics. I am informed by a German naturalist, Mr. Spatz, that in the districts where it still lingers in Tripoli it affects plateaux with a fair amount of vegetation, rather than the sandy desert which is the home of the Addax. The Hartebeest is known to the Arabs by the name of Bagar-al-hamra—"the Red Cow."

The Addax (*Addax naso-maculatus*) is still a Tunisian animal, though it is rarely heard of now north of the limits of the real sandy desert. In my recent journey into the Tunisian Sahara I saw a fresh-killed head brought in by an Arab, and found the horns and skins abundant and cheap as articles of purchase. In this manner I obtained two fine specimens of male horns and one very good female head. I saw in the possession of a French officer—and drew for the 'Book of Antelopes'—a pair of male Addax horns which attained a third complete turn. The horns of the female have only one turn or twist, are much slenderer and more curved in general outline, and altogether more oryagine in appearance. Yet they suggest, as do those of the male still more strikingly, an equal affinity to the immature male and to the female horns of the Sable Antelope. The Addax, I think, is on the whole more an oryagine type than a hippotragine, but it probably branched off from the parent stock of both groups not long after they—in my opinion—developed from the Cobus group through some form like *Cobus marica*.

In the Tunisian Sahara the Arabs report the existence of a true Oryx—seemingly *Oryx leucoryx*. A small specimen of this Antelope (immature) is to be seen—stuffed—in the Bey's Natural History Collection at the Marsa near Tunis. It is also remarkable that the Oryx is represented as a Tunisian animal in the Roman frescoes and mosaics now preserved in the Bardo Museum.

The Udad, or Barbary Wild Sheep, is still common in the mountains of Southern Tunisia. The Barbary Stag is found in some abundance in the well-wooded mountains of the West, along the Algerian frontier. It is now carefully protected by the French and has begun to revive in numbers, having been once nearly extinct.

Three species of Gazelles seem to be found in Tunis—I have seen them all, either alive or dead: the Common Gazelle (*Gazella dorcas*), the Mountain Gazelle (*G. cuvieri*), and Loder's Gazelle (*G. loderi*).

The creatures represented in the numerous Roman mosaics and frescoes include—besides most of those mentioned—the Ostrich (now extinct in Tunisia) and the African Elephant. The latter is represented unmistakably. But there is no reason why it may not have been imported from Numidia (modern Algeria) rather than have been at that time a mammal indigenous to the relatively bare plains of Tunisia, where it would miss the necessary forests.

It will be remembered that Hanno, the Carthaginian, who made an expedition along the Morocco coast in about 520 B.C., records having seen large herds of Elephants in the R. Tensift, not far from the present capital of Morocco.

2. On some Pigeons and Parrots from North and North-west Australia. By Prof. R. COLLETT, F.M.Z.S.

[Received April 7, 1898.]

(Plates XXVIII. & XXIX.)

Dr. Knut Dahl, a young Norwegian naturalist who, during the years 1894-95, lived in North and North-west Australia, and occupied his time in collecting objects of natural history for the Zoological Museum at Christiania, returned home in the spring of 1896 with a valuable collection of vertebrates and invertebrates. The Mammals of this collection have already been worked out¹, and Mr. G. A. Boulenger has given an account of some new *Sauria*² contained in it.

On a preliminary examination of the considerable collection of birds, I found, amongst the *Psittaci* and *Columbeæ*, examples of three species hitherto not described, of which I append short descriptions, together with some remarks on one or two other interesting forms.

The localities in which these species were found are Arnhem Land (North Australia)³ and Roebuck Bay, situated somewhat further to the south (North-west Australia).

1. PETROPHASSA ALBIPENNIS Gould (1840).

Petrophassa albipennis, Salvadori, Cat. B. Br. Mus. vol. xxi. p. 530 (1893).

One specimen from Victoria River, 4th April, 1895 (sex unknown).

¹ Collett, "On a Collection of Mammals from North and North-west Australia" (Proc. Zool. Soc. Lond. 1897, p. 317, with plate).

² Boulenger, "Descriptions of four new Lizards from Roebuck Bay, N.W. Australia, obtained by Dr. Dahl for the Christiania Museum," Ann. Mag. Nat. Hist. ser. 6, vol. xviii. Sept. 1896.

³ A few short remarks on these localities are given in Proc. Zool. Soc. Lond. 1897, pp. 317-318.